

Case Report

Unusual foreign bodies in nose and throat

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ABSTRACT

Ear, nose and throat practice presents the surgeons with an amazing variety of foreign bodies to deal with, some of them are truly unusual. They may be inert, hygrophilic or corrosive. Foreign body impaction in ear, nose and throat is among the medical-surgical emergencies of otorhinolaryngological practice. Some foreign bodies have been well documented among the objects that normally get impacted in ear, nose and throat. Here we present two unusual cases that happened to be managed in our institution. First case was of a patient who came with an unusual foreign body lodged in the nose and nasopharynx and the second case was of a migrating foreign body in throat. The main aim and objective of these case reports is to highlight on unusual foreign bodies and their management. These foreign bodies were never found to have been reported previously in our review of literature.

Keywords: Unusual foreign bodies, Metallic chain in nose, Migrating metallic wire in the throat

INTRODUCTION

Foreign bodies in the ear, nose and throat are common in the emergency department.¹ According to Jonathan et al, the nasal foreign bodies are common in paediatric age group and can affect adults with psychiatric illness and mental retardation. Children commonly introduce foreign bodies in order to explore their bodied and also to relieve irritation.¹ Nasal foreign bodies can be found in any portion of nasal cavities, although they are typically discovered along the floor of nose just below the inferior turbinate.² Unilateral foreign bodies affect the right side about twice as often as left. This may be due to a preference of right-handed individuals to insert object in their right nostril.

Accidental ingestion of foreign bodies is common in ENT practice. The most common foreign bodies in adults-fish bone, chicken bone and dentures. A very small number of ingested foreign, if left untreated, may result in life threatening complications. Usually, oral foreign bodies

migrate to the adjacent structures.³ Migration of foreign body from throat to rectum is very rare and never been reported in literature.

CASE REPORT

Case 1

A 12-year-old boy reported to our hospital with a metallic chain of length about 35 cm inserted into his left nostril as shown in the Figure 1. History revealed that the patient had the habit of nose picking with the chain frequently. He himself voluntarily inserted the foreign body which got stuck into the nasal cavity. The parents rushed with the child to our hospital for the removal of foreign body. X ray nose and PNS (lateral view) (Figure 2) showed that it was a radio-opaque foreign body (metallic chain with hooked end) that had pierced the lower part of the posterior end of the septum and protruded into the opposite choana. The patient was shifted to emergency OT for removal under general anaesthesia after the routine investigations. Nasal endoscopic examination

done using 0-degree 2.7 mm rigid endoscope. On examination, the foreign body (metallic chain) was visualized and it was found along the floor of left nasal cavity with the hook piercing the posterior end of the septum. The adjoining areas of the septum on the left side was oedematous with minimal bleeding and so the endoscope was introduced into the right nasal cavity to visualise the pierced end. The hook was seen protruding into the right side choana as in Figure 3a, 3b. The foreign body was pushed backwards and posteriorly in order to release it from the anchored tissue and was pushed into the left nasal cavity and removed in one piece as in Figure 4. The anterior nasal pack was given on the left side and the patient was extubated. Postoperatively, the patient was given intravenous antibiotics and anterior nasal packing was removed on the next day. The patient was given saline nasal wash to remove the iron rusts and to prevent synechiae. The patient was discharged on day 2 of post-operative period. He had an uneventful recovery in the follow up period.



Figure 1: Foreign body (metallic chain) in left nostril.



Figure 2: X-ray nose and PNS (lateral view) showing metallic chain with the hook end near the posterior part of nasal septum.

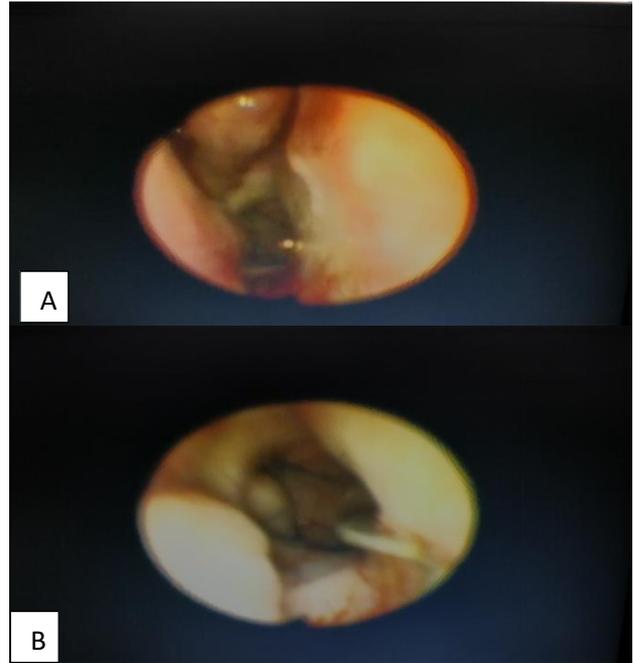


Figure 3 (A and B): 0 degree nasal endoscopic picture showing the metallic hook protruding into the right side choana.



Figure 4: Metallic chain removed from left nostril.

Case 2

A 50-year-old male presented to the emergency department with history of pain while swallowing food for 1 day. He complained that the pain started immediately after having dinner. There was no history of respiratory distress. CT scan of neck (axial and sagittal view) done which showed an opaque foreign body at the level of cricopharynx as shown in the Figure 5. A 70-degree direct laryngoscopy was done, which showed a metallic wire in the right pyriform fossa as shown in the Figure 6. Rigid laryngoscopy/esophagoscopy was planned for removal of foreign body under general anaesthesia in emergency OT after routine investigations. On endoscopic examination, the foreign body could not be visualized and the patient was extubated. He was

advised for radiograph of neck and abdomen and it was surprisingly found to be in the ascending colon near the right iliac fossa as shown in Figure 7. General surgery consultation was given. They repeated X-ray of abdomen and the foreign body was found to be in the rectum and finally removed successfully by proctoscopy.



Figure 5: CT scan of neck (axial view) showing opaque foreign body at the level of cricopharynx.



Figure 6: 70 degree direct laryngoscopy showing metallic wire in right pyriform fossa.

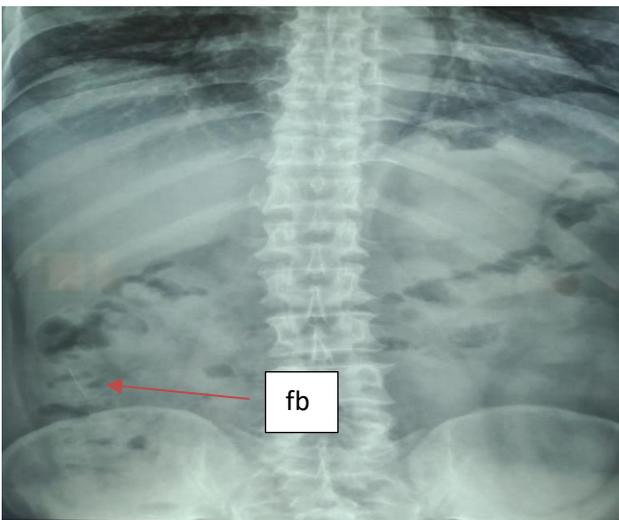


Figure 7: X-ray abdomen showing opaque foreign body in the ascending colon near the right iliac fossa.

DISCUSSION

Foreign bodies are not unusual in the head and neck region, particularly in the body orifices. A detailed examination after taking history is mandatory. A review of literature shows that intranasal foreign bodies have been frequently reported among children. Among adults, however, they occur very rarely and are caused mostly by injury in an accident, trauma or coexisting mental disorders.⁴ Many foreign bodies are inert and can remain in the nose for years without mucosal damage. However, most foreign objects initiate congestion, swelling of the mucosa, ulceration, mucosal destruction and epistaxis. This can result in a foul fetor and rhinolith formation. Certain foreign bodies, such as vegetable, absorb water from the tissues and swell and can evoke an intense inflammatory reaction that can be sufficient to produce toxemia. Thus, several important complications may occur with the presence of a nasal foreign body, including formation and development of rhinoliths, erosion into a contiguous structure, toxic shock syndrome and development of infections in surrounding structures including acute sinusitis or otitis media, periorbital cellulitis, meningitis, acute epiglottitis, diphtheria, and tetanus.⁵

In case of complaint of dysphagia and odynophagia endoscopy should be done at first opportunity. Also, the dictum, that if a foreign body crosses cricopharyngeal sphincter, it is easily thrown out of body may not stand good in case of pointed or penetrating foreign bodies and they require careful handling for the fear of tear or perforation of oesophagus. Sharp objects have a perforation rate of 15-35%.⁵ Other complications of oesophageal foreign bodies include oesophageal oedema, laceration or erosion, hematoma, granulation tissue, retropharyngeal abscess, mediastinitis, migration of the foreign body into the fascial spaces of the neck, arterial-oesophageal fistula with massive haemorrhage, respiratory problems, strictures, and proximal oesophageal dilation; fatalities have been reported.^{7,8} Endoscopic removal of foreign bodies allows evaluation of any oesophageal injury and visualization of multiple or radiolucent foreign bodies.^{8,9} Although some foreign bodies can be safely removed using a fiber-optic esophagoscope, rigid esophagoscopes with Hopkins rod telescopes remain the gold standard for evaluation and removal of oesophageal foreign bodies. Rarely, foreign bodies are so large or sharp that lateral pharyngotomy is necessary; foreign bodies that have migrated into the soft tissues of the neck require open neck exploration.^{7,10}

CONCLUSION

The incidence of foreign bodies in ear, nose and throat is increasing due to increased use of toys and equipment. Early diagnosis and management minimize the rate of complications. All the emergency doctors should be educated to diagnose these types of foreign bodies and only otolaryngologist should be consulted for

uncomplicated removal. After removal of the foreign bodies, all the patients should be followed up until symptoms subside. Migrated foreign body has the potential to cause life-threatening complications. Hence, it should be investigated properly and removed promptly.

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